Benjamin K Derby

List of Publications by Year
in descending order

25	524	933264 10	642610 23
papers	citations	h-index	g-index

25	25	25	315
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Phase transformation behaviors and properties of a high strength Cu-Ni-Si alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 697, 37-47.	2.6	147
2	Microstructure and mechanical properties of a high strength Cu-Ni-Si alloy treated by combined aging processes. Journal of Alloys and Compounds, 2017, 695, 2413-2423.	2.8	87
3	Suppression of shear banding in high-strength Cu/Mo nanocomposites with hierarchical bicontinuous intertwined structures. Materials Research Letters, 2018, 6, 184-190.	4.1	45
4	Effects of substrate temperature and deposition rate on the phase separated morphology of co-sputtered, Cu-Mo thin films. Thin Solid Films, 2018, 647, 50-56.	0.8	42
5	Processing of novel pseudomorphic Cuâ€“Mo hierarchies in thin films. Materials Research Letters, 2019, 7, 1-11.	4.1	26
6	Design of bicontinuous metallic nanocomposites for high-strength and plasticity. Materials and Design, 2019, 166, 107602.	3.3	25
7	3-D phase-field simulations of self-organized composite morphologies in physical vapor deposited phase-separating binary alloys. Journal of Applied Physics, 2019, 126, 075306.	1.1	21
8	Hillock formation in co-deposited thin films of immiscible metal alloy systems. Thin Solid Films, 2020, 693, 137692.	0.8	15
9	Microstructure Evolution and Hardness of an Ultra-High Strength Cu-Ni-Si Alloy During Thermo-mechanical Processing. Journal of Materials Engineering and Performance, 2016, 25, 2615-2625.	1.2	13
10	Effect of addition of Ni and Si on the microstructure and mechanical properties of Cuâ€“Zn alloys. Journal of Materials Research, 2017, 32, 3137-3145.	1.2	10
11	Microstructural characterization of phase-separated co-deposited Cuâ€“Ta immiscible alloy thin films. Journal of Materials Research, 2020, 35, 1531-1542.	1.2	10
12	Microstructure development and morphological transition during deposition of immiscible alloy films. Acta Materialia, 2021, 220, 117313.	3.8	10
13	Fracture resistance of hierarchical Cuâ€“Mo nanocomposite thin films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 799, 139891.	2.6	8
14	Electrochemical stability, physical, and electronic properties of thermally pre-formed oxide compared to artificially sputtered oxide on Fe thin films in aqueous chloride. Corrosion Science, 2021, 186, 109456.	3.0	8
15	Compositionally-Driven Formation Mechanism of Hierarchical Morphologies in Co-Deposited Immiscible Alloy Thin Films. Nanomaterials, 2021, 11, 2635.	1.9	8
16	Strain-rate dependent deformation mechanisms in single-layered Cu, Mo, and multilayer Cu/Mo thin films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 838, 142776.	2.6	8
17	Metal-ion-controlled growth and nanoindentation response of 3D, bicontinuous Cuâ€“Fe thin films. Journal of Applied Physics, 2020, 128, 035303.	1.1	7
18	Microstructure and mechanical properties of nanoscale Cu/(Ta50Nb25Mo25) multilayers. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 799, 140200.	2.6	7

#	Article	IF	Citations
19	A pathway to synthesizing single-crystal Fe and FeCr films. Surface and Coatings Technology, 2020, 403, 126346.	2.2	6
20	Microstructural analysis of novel Gd2Ti2O7 thin films processed via sputter deposition. Materials and Design, 2021, 199, 109430.	3.3	5
21	Effect of lattice strain on magnetism in epitaxial YCrO₃ films. Materials Research Letters, 2022, 10, 29-35.	4.1	5
22	Faceted He-Filled â€œPancakesâ€•Confined within Nanoscale Metal Layers. Jom, 2020, 72, 145-149.	0.9	4
23	Hierarchical morphologies in co-sputter deposited thin films. Physical Review Materials, 2020, 4, .	0.9	3
24	Influence of metal nanocomposite morphology on Helium implantation response. Scripta Materialia, 2020, 177, 229-233.	2.6	2
25	Microstructural dependence of defect formation in iron-oxide thin films. Applied Surface Science, 2022, 589, 152844.	3.1	2